



Contents

*Gettysburg*

1-3 *Gettysburg*

4-5 *Surgeon General O'Reilly*

Chloroformum

6 Since July is the 140th anniversary (1-3 July 1863) of the battle of Gettysburg, this issue will have a focus towards the Civil War. The Civil War was significant both in the history of the United States, but also in Army Medicine. It is in this war that MAJ (Dr.) Jonathan Letterman developed a concept of providing medicine in the field that is still in use today. In this issue, our museum staff has two articles describing some Civil War artifacts found in the museum, the “medical knapsack,” and the “surgeon’s sword.” So on your next trip to Fort Sam Houston, don’t forget to stop and the AMEDD Museum and see the many historical artifacts from our history.

Henry Porter at Little Big Horn

7-8 *Henry Porter at Little Big Horn*

8-9 *Veterinary Corps anniversary*

1903 Photo Album

10-11 *1903 Photo Album*

12 *Civil War medic's knapsack*

The AMEDD Regiment

13-15 *The AMEDD Regiment*

16 *A surgeon's sword*

Book Review

16

Contacts



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The AMEDD at Gettysburg

An Overview

On 1 July 1863 a meeting engagement west of Gettysburg PA escalated into one of the biggest battles in the US. The Union Army of the Potomac (roughly 92,000 strong) was moving west to block the Confederate Army of Northern Virginia (roughly 75,000 strong) which had invaded Maryland and moved into Pennsylvania. The Army of the Potomac's Medical Director, Major Jonathan Letterman, would rise to the occasion of dealing with almost 15,000 US wounded and roughly 7,000 wounded Confederate prisoners. Each regiment (nominally 1,000 men strong) had 2 or 3 surgeons, a medical supply wagon, and two ambulances; one surgeon was usually detached to the divisional hospital. There were no medical enlisted men with regiments, and bandsmen were usually assigned as litterbearers and medical assistants during battle. Each brigade had a small medical staff, a medical supply wagon, and 3 ambulances. Divisions had a single medical advisor, a field hospital with 3 operating teams, and more ambulances. The Corps had a 3-man medical staff and ambulances; the field hospitals were grouped at corps level.

However, the commander of the Army of the Potomac, MG George Meade, authorized only ammunition wagons and ambulances to travel with regiments and brigades, no medical supply or hospital wagons. (XII Corps did not implement the order, and many units kept their medical supply wagons while leaving hospital wagons, mainly carrying tents, behind.) Meade wanted the army more mobile, especially as he was not certain of winning the coming battle. Letterman obtained permission to form a 25-wagon supply train, but it could only follow behind the army.

On 1 July, US forces held Confederate attacks in the morning; casualties were evacuated to local buildings for treatment. However, additional Confederate forces drove the US troops back in the afternoon, overrunning the improvised hospitals. Many medical personnel stayed with their patients. This was before Geneva Protocols, but the two armies had agreed medical personnel were considered neutral.

On 2 July, two of the corps had their hospitals far forward (some were shelled or even received small-arms fire) because the US forces might be attacking or defending and needed their hospitals accessible. In late afternoon the hospitals were relocated further back, which meant moving over 4,500 wounded. The fighting was concentrated both on the Union left and in the afternoon, creating local evacuation problems. Many wounded were left on the battlefield until an unofficial truce during the night allowed ambulances to move freely. (V Corps alone collected 1,300 wounded in 10 hours.)

On 3 July, total casualties were only 2,500, and those were mainly during the bombardment before Pickett's Charge and during that charge. They never threatened to overwhelm the hospital capabilities.

On 4 July the armies watched each other, but did not engage. Thunderstorms in the afternoon led to local flash floods, and since some hospitals were near streams (for the water supply, and to be out of the way) a few immobile patients drowned.

Lee retreated on the night of 4/5 July and left almost 7,000 Confederate wounded and 1,000 US wounded behind. He left the captured US medical personnel, but no supplies. Letterman's supply train arrived, and a private organization (the US Sanitary Commission) also provided supplies (nearly \$400,000-worth at today's prices). Letterman also asked The Surgeon General to send 70 extra doctors, not for replacements (only 13 surgeons were wounded at Gettysburg, 1 dying of his wounds on 3 July) but because the Army of the Potomac would be moving after the battle and he would need to leave some doctors with the wounded. Letterman also had to leave a great deal of equipment, which could not be replaced for a month.

On 22 July a hospital camp (called Camp Letterman) opened at Gettysburg for about 16,000 patients, about 150 per doctor. Almost 20% of the Army of the Potomac's doctors stayed. Although railway evacuation from Gettysburg started on 7 July, the camp stayed open until 20 November as patients gradually became transportable.

Assistant Surgeon (1LT) John S. Billings had already commanded a rear-area hospital in Washington, DC, and was now assigned to the Fifth Corps in the field. He reported:

... About the middle of June, the 2d Division of the Fifth Corps took up its line of march, which, passing, successively, through Benson's Mills, Catlett's Station, Manassas, Centreville, Gum Spring, Aldie Gap, Leesburg, Edwards's Ferry and Frederick, terminated, so far as I was concerned, at Gettysburg, Pennsylvania on the morning of the 2d of July. On this march, all the ambulances were collected into a train, which followed immediately behind the division, and was super-intended by a medical officer detailed for the purpose. Transportation was allowed in the proportion of one wagon for the medical supplies of two regiments, and this train of wagons followed close behind the ambulances. For the approaching battle, I was detailed as surgeon in charge of the field hospital of the division, and, also, as one of the operators, my assistants being Assistant Surgeons Whittingham and Breneman, U.S.A. At this time, I was attached to the 7th Infantry, and also acted as medical officer for the 10th Infantry during the march. On the 1st of July, about four o'clock P.M., the division reached Hanover, distant about twelve miles from Gettysburg, and went into camp. Just as the tents were fairly pitched, news came of the repulse of the First Corps, and a few minutes later, we were on the road to Gettysburg.

An early photograph of John S. Billings.
Courtesy National Library of Medicine



About six A.M., July 2d, the division marched into position, and formed line of battle on the right of the somewhat horse-shoe shaped line in which our army was drawn up. ... About half past three o'clock P.M., the division was brought into action, marching down a little road to the right of the large conical hill called Round Top, which was on the extreme left of the long arm of our horse-shoe like line of battle. I accompanied my regiment until they were under fire, and was then ordered to repair to a large stone house and barn, near the base of Round Top, and there establish a field hospital. When I reached the place, our skirmishers were lying behind the stone walls around the house, and as I rode up, a small body of rebels further up the hill, and about seventy-five yards off, saluted me with a volley. They were captured a moment afterwards by a regiment which had passed between them and their own line. On entering the house, I found it unoccupied, and bearing evident traces of the hasty desertion of its inmates. A good fire was blazing in the kitchen stove, a large quantity of dough was mixed up, the bake-pans were greased; in short, everything was ready for use. I immediately set my attendants at work baking bread and heating large boilers of water. In five minutes, I was joined by the other medical officers detailed for the hospital. The ambulance trains reported to me fifteen minutes later, having with it three Autenrieth [supply] wagons, and by the time the operating tables were set up, and materials for dressing arranged, the wounded began to pour in. I performed a large number of operations of various kinds, received and fed seven hundred and fifty wounded, and worked all that night without cessation. An agent of the Sanitary Commission visited me in the evening, and furnished me with a barrel of crackers, a few lemons, etc. Of stimulants, chloroform, morphine and materials for dressing, the Autenrieth wagons furnished an ample supply.

On July 3d, at seven o'clock A.M., I was ordered by Surgeon Milban, medical director of the corps, to remove the hospital to a point about one mile to the rear. This was done as rapidly as possible. A few shells began to drop in as the first train of ambulances moved off, and by eleven o'clock A.M., the fire on that point was quite brisk. Little or no damage was done, however, and by four o'clock P.M., all the wounded were safely removed. The new site was a grove of large trees, entirely free from underbrush, on the banks of a little creek, about half a mile from the Baltimore turnpike. By means of shelter-tents, india-rubber blankets, etc., shelter was arranged for all the worst cases, and two thousand dry rations, with three oxen, were sent to the hospital by Doctor Milban in the course of the afternoon. All of this day, I was employed in operating and in dressing the more urgent cases. The following morning, it began to rain, and continued to do so for five days and nights with very little cessation. On the morning of the 5th, the regimental medical supply wagons came up, and from them I removed all the hospital tents and tent flies, with two hospital mess chests. On this day, the division moved. I was left behind in charge of the hospital, which then contained about eight hundred wounded. Twenty men were detailed from the division to act as assistants about the hospital. I was also given two ambulances and two six-mule wagons. The ambulance train, which had up to this time been engaged in collecting the wounded of the division from the various corps hospitals to which some of them had been carried, and in hauling straw for bedding, accompanied the division, as did also the Autenrieth wagons. By this time, Assistant Surgeon Brinton had reached White church with a special medical supply train, and from him I procured such supplies as were most needed. The greatest want which I experienced was that of tools. I had not a shovel or pick with which to bury the dead or construct sinks, and no axes. I was compelled to send out a foraging party to the farm houses, who, after a day's labor, succeeded in procuring two shovels and an axe. Seventeen hospital tents were pitched, and in these were placed all the most severe cases, about seventy-five in number. Under the tent flies, I placed one hundred more patients, and the remainder were all under shelter-tents, and were arranged by regiments. By means of the wagons, I procured abundance of clean fresh straw from about five miles distance, and commissary stores and fresh beef were furnished ad libitum. Assistant Surgeons Ramsay, Whittingham, Bacon and Breneman, U.S.A., and two surgeons of volunteer regiments, whose names I cannot at this moment recall, remained with me, and through their energy and zeal the labor of organizing the hospital was quickly completed. Especial praise is due to Doctors Ramsay and Whittingham, whose labors were unceasing, and from whom I received many valuable suggestions. Very few shell wounds came under my notice at this battle, and none from round balls or buckshot. Most of the wounds were from the conoidal ball, and a large proportion were in the lower extremities. Of three exsections of the shoulder joint, all were successful in so far as that the patients recovered. In one case, I removed four and a half inches of the shaft. No cases of tetanus occurred in this hospital. Of secondary hemorrhage there were thirteen cases up to the 22d of July, at which time I left the hospital. Three of these cases occurred after amputation of the thigh; in two the hemorrhage was arrested by pressure, and, in the third, it was found necessary to open the flaps and secure the bleeding vessel. Three cases of hemorrhage from the anterior tibial artery occurred; two were arrested by pressure, and, in the third, amputation was performed with a good result. In one case, the internal maxillary was the bleeding vessel. The hemorrhage in this case was readily controlled by pressure and persulphate of iron. Assistant Surgeon Howard, U.S.A., left in the hospital six cases of gunshot wounds of the thorax, all of which he had treated by hermetically sealing the orifice with collodion. Four of these men died. What became of the other two, I do not know. In one of these cases, I made a post mortem examination, and found an abscess of the lung, communicating with the pleural cavity, which last was filled with a sanguineous purulent fluid. Four cases of a similar nature were treated with moist charpie. One of these died, and one was dying when I left; the other two were, in my opinion, in a fair way to recover. Five cases of gunshot fracture of the cranium came under my notice. Four of these involved the occipital bone, and all were fatal. A low muttering form of delirium, with occasional paroxysms of furious mania, was present in all from the commencement. Two cases occurred of gunshot fracture of the femur in the upper third. Both were treated by Smith's anterior splint, and one died. In no case of fracture of the long bones did I attempt any formal resection, but confined myself to removing splinters and foreign bodies, and cutting off very sharp projecting points with the bone forceps. From my experience in Cliffburne hospital, I am convinced that regular resections in such cases are worse than doing nothing at all.

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For more on the AMEDD in the Civil War, see chapters 8-13 of The Army Medical Department, 1818-1865 by Mary C Gillett, online at <http://history.amedd.army.mil/booksdocs/civil/gillett2/gillett.html>, Letterman's memoir, online at <http://history.amedd.army.mil/booksdocs/civil/lettermanmemoirs/medrecindex.html> and extracts of the Medical and Surgical History of the War of the Rebellion about Gettysburg, online at <http://history.amedd.army.mil/booksdocs/civil/Gettysburg/Gettysburgrpt.html>.

A Full Career: Surgeon General Robert O'Reilly

BG Robert M. O'Reilly (January 14, 1845 -November 3, 1912), served as Surgeon General from September 7, 1902 to January 14, 1909. His life and career in Army Medicine were filled with numerous adventures and unfortunately personal injury. Robert O'Reilly was born and raised in Philadelphia. He had begun to study medicine at the University of Pennsylvania when the Civil War erupted. Exchanging his classroom studies for a very real internship, O'Reilly was appointed in the Army as a medical cadet in 1862. During the Civil War medical cadets were typically medical school students with a year or two of study. In service they would assist in bandaging, litter bearing, and other tasks. In this capac-

ity, O'Reilly worked at Cuyler General Hospital in Philadelphia, at an Army hospital near Chattanooga, Tennessee, and in the office of the medical director of the Army of the Cumberland.

After the war, O'Reilly continued his medical studies at the University of Pennsylvania and graduated in 1866. On May 14, 1867, he was appointed assistant surgeon in the Army and sent to Fort Trumbull, Connecticut. Shortly thereafter he was sent to California by way of Nicaragua with a shipment of recruits. From California he took part in another long journey. While en route with recruits from San Francisco to Whipple Barracks, Arizona, he was wounded by the accidental discharge of a revolver at Camp Mud Springs. Unable to complete travel to Arizona, O'Reilly recuperated at Drum Barracks, California. After making a complete recovery, O'Reilly reached Arizona and served at Camp Date Creek, Camp McDowell, Camp Reno, Fort Whipple, Camp Halleck, and Fort Union, all in the southwest and all presumably with the 8th Cavalry, until June 1870. During this period the 8th Cavalry had continual skirmishes with various bands of the Comanche, Apache, and other tribes. Although standards and awards have changed since the 19th Century, 84 members of the unit received the Medal of Honor in that period.

BG Robert O'Reilly

The summer of 1870 was spent in the field in Colorado with the 8th Cavalry, after which O'Reilly was assigned to Fort Laramie, Wyoming, from May 1871 to July 1874. O'Reilly participated in the 1874 campaign against the Sioux and when that ended he was stationed at Fort D. A. Russell at Cheyenne, Wyoming. In June 1875 O'Reilly was ordered east, with short tours of duty at Fort McHenry, Maryland, and Fort Hamilton, New York. In November 1875 he was assigned to Fort Ontario, New York, until May 1878. Although stationed there, in 1877 O'Reilly was on duty in relation to labor disturbances in Pennsylvania during "The Great Railroad Strike of 1877". At some point in the riots and fighting Robert O'Reilly sustained another injury which incapacitated him to a remarkable extent for two years.

In April 1897 O'Reilly was assigned to Fort Wayne, Michigan, and from there accompanied troops into the field in the Spanish-American War. At Mobile, Alabama, he was appointed chief surgeon of the First Independent Division, commanded by Major General John J. Coppinger. He was later named chief surgeon of the 4th Army Corps and then chief surgeon on the staff of Major General James F. Wade in Havana. The medical department ship *Bay State* was placed at his disposal and he was sent to Jamaica to learn the British army's experience in tropical hygiene. He studied their housing, food, clothing, and care of troops. Returning from Cuba in November 1899 O'Reilly commanded the

Josiah Simpson Hospital at Fortress Monroe, and later became chief surgeon of the Department of California at San Francisco.

Robert O'Reilly was promoted captain May 14, 1870, major November 1, 1886, and lieutenant colonel February 21, 1900, he reached the grade of colonel on February 14, 1902. His later promotions were beneficial in a crucial aspect. When Surgeon General William H. Forwood's retired in September 1902 a regulation stipulated the appointment to Surgeon General should be for a period of four years, and a ruling that the appointee must have four years to serve before his compulsory retirement for age. These caused several senior medical officers to be bypassed for consideration as Surgeon General. Colonel O'Reilly, the senior officer able to meet the requirements, was appointed Surgeon General (and Brigadier General) on September 7, 1902.

During O'Reilly's tenure as Surgeon General numerous changes were made to the Army Medical Department. Some of O'Reilly and his staffs' recommendations were: (1) a larger Medical Corps, (2) authority to establish in peacetime volunteer hospital corps, (3) a nurse corps of selected trained women nurses ready to serve whenever necessity should arise, (4) a year's supply, for an army of at least four times the normal strength, of all medicines, hospital furniture, and stores as are not materially damaged by keeping, to be held constantly on hand in the medical supply depots, (5) Medical Department control of transportation for medical supplies, (6) simplification of administrative paper work, (7) provision for purchase by subsistence funds of articles of special diets for the sick.

In his last annual report, in 1908, General O'Reilly was able to say that all of these objectives had been realized or were likely. Toward the latter part of his term an appropriation was obtained from Congress for the purchase of the site and for the beginning of construction of a general hospital in Washington. (Walter Reed General Hospital) Other achievements during Surgeon General O'Reilly's tenure included the passage of the reorganization act of April 23, 1908 (35 Stat. 66), which created the Medical Reserve Corps. General O'Reilly was president of the board which recommended the adoption of typhoid prophylaxis for the Army. In 1906 he reconstituted the Board for the Study of Tropical Diseases in Manila and set for it certain objectives. In that same year he represented the United States at the international conference at Geneva, Switzerland, for the revision of the Geneva Convention.

At the expiration of his first term of appointment in 1906 he was reappointed and served until the time for his compulsory retirement for age on January 14, 1909. Never of strong constitution and the subject of much ill health during his Army career, Robert O'Reilly's remaining three years were spent quietly in a state of semi-invalidism in Washington, where he died of kidney disease on November 3, 1912.

Sources:

J. E. Pilcher, Surgeon Generals of the Army (1905); F. H. Garrison, In Memoriam : General Robert Maitland O'Reilly, in N. York. M. J., Nov. 30, 1912; Kelly and Burrage, American Medical Biographies (1920); Who's Who in America, 1912-13; P. M. Ashburn, History of the Medical Department of the U. S. Army (1929).

[Extracted from "Chiefs of the Medical Department, U.S. Army 1775-1940, Biographical Sketches," Army Medical Bulletin, No. 52, April 1940, pp. 79-83, compiled by James M. Phalen, Colonel, Medical Corps, U.S. Army retired]



The AMEDD tested ether in the Mexican-American War, and made both ether and chloroform standard items in 1849.

During the Civil War, civilian industry had trouble producing enough medical supplies, and with consistent quality. Surgeon General William Hammond established three official laboratories, in Astoria NY, Philadelphia PA, and St Louis MO.

This label not only shows the date of manufacture (and by implication an expiration date), and the reliable manufacturer, it shows the contemporary coat of arms of the Army Medical Department. Apparently adopted in 1818, when there were twenty states, the shield includes the Staff of Aesculapius, the Greek god of medicine and healing. The motto can be translated various ways, but most commonly as "Knowledge and Progress."

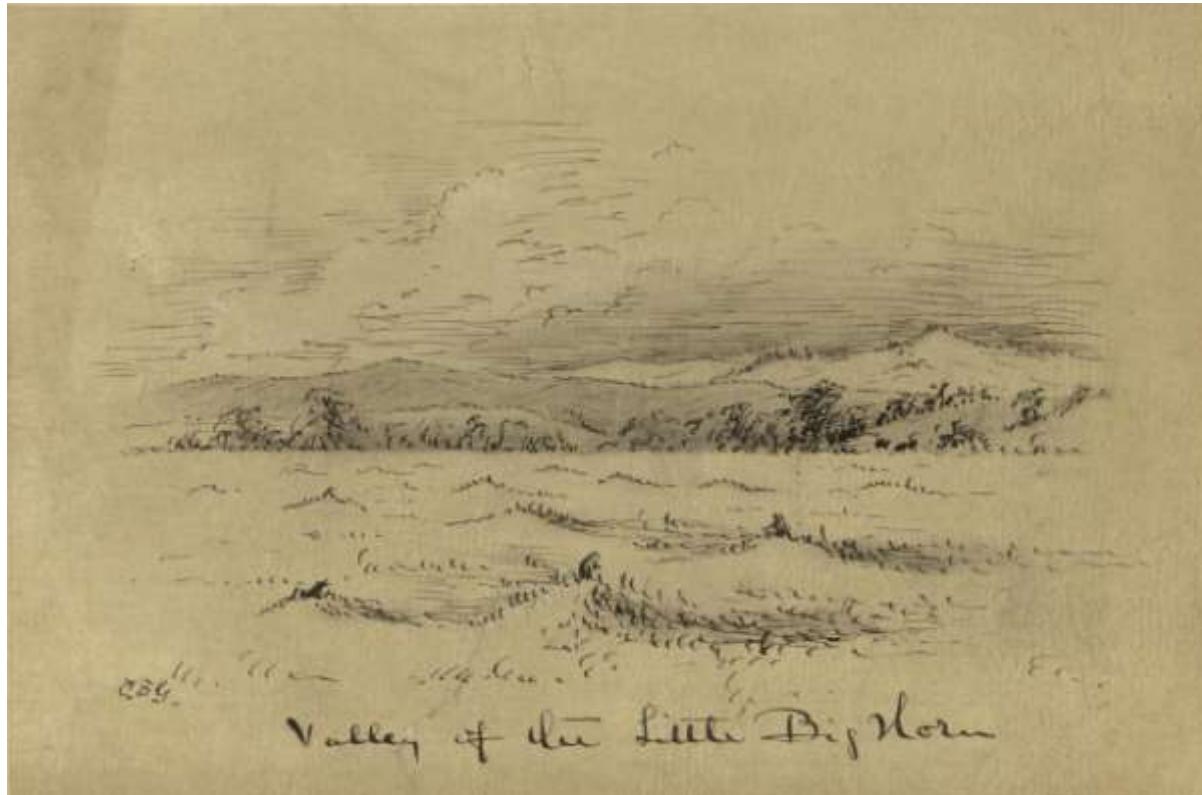
Surgeon Henry R. Porter at Little Big Horn

This excerpt is from Deliverance from the Little Big Horn: Doctor Henry Porter and Custer's Seventh Cavalry by Joan N. Stevenson, copyright 2012, University of Oklahoma Press.

As General Custer and the men of his Seventh Cavalry approached the valley of the Little Big Horn on June 25, 1876, they were accompanied by three surgeons, who were divided among the three fighting battalions formed just hours before the start of the battle. Dr. George Lord would continue on with Custer and ultimately ride to his death. The other two surgeons were assigned to Major Marcus Reno's battalion, which initiated the fighting at the southern end of the Indian village. When a vast force of warriors, well-armed with repeating rifles, turned Reno's flank and threatened to encircle his entire command, the Major ordered a "charge" to the top of a bluff about a mile away, looking for relative safety in elevation. While scaling the bluff, Dr. James DeWolf was shot seven times and killed. That left the most robust of the three surgeons and the youngest at age twenty-eight, Dr. Henry Porter, who managed to ride through a gauntlet of Indians and up the steep bluffs to Reno's hilltop position. There he assumed the care of over 350 men under Reno's command as they fought for their lives against as many as 2,000 Indian warriors encircling them below.

Porter's field hospital, located in a shallow depression in the center of the hilltop, was encircled by nearly 450 to 500 animals – all of the remaining cavalry horses and the 140 mules from the pack train – in an effort to protect the wounded from the Indian's rifle fire. The care in the makeshift hospital was not the medical care of antibiotics, sterile equipment, intravenous fluids, and trained nurses. And Porter faced an even more basic restriction: he lacked the volume of water necessary to wash away the blood, clots, and debris in the wounds and soak the lint for the cold-water dressings. His patients groaned from their thirst, made acute by the ninety-degree heat of the day, battle exertion, and blood loss. Perhaps the Indians need not shoot another bullet, Porter thought. Just sit tight below and eventually the corralled cavalry on the hilltop would simply die of thirst and dehydration. The bleeding patients in the field hospital would be the first to go.

Twelve hours later, after another fierce daylong fight on June 26, the Indian village – nearly 7,000 people – broke camp to move west and closer to the Big Horn Mountains. They were done with fighting. Reno's command took advantage of the unexpected reprieve to recover from nearly sixteen hours of relentless attack. What they didn't know at the time was that the cavalrymen led by General Custer had ridden into the thick of a fight that annihilated the battalion. On the following day, a column of soldiers under General Alfred H. Terry and Colonel John Gibbon finally arrived and rescued Major Reno and the soldiers who remained on the hilltop.



Valley of the
Little Big Horn,
C.D. Gedney,
c1880-1887.
Courtesy
Library of
Congress

Although Reno's two-day battle with the Indians had ended, Henry Porter's life-saving medical work was far from over, as he attended to the wounds of sixty-eight soldiers and two Indian scouts and performed surgeries, including two amputations. The military ethos of "never leave the wounded behind" was as vital in 1876 as it is today. Transported on both hand and two-mule litters made from the hides of dead cavalry horses, the wounded endured a nighttime evacuation of fifteen miles, twice crossing a river, scaling a steep bluff, and chancing a treacherous descent from the plateau to reach the steamboat *Far West*, waiting at the mouth of the Little Big Horn River. Porter and his patients then faced a harrowing 700-mile journey up the Yellowstone River and down the Missouri River, facing the perils of unseen obstacles in the rushing river currents, sharpshooting Indians hidden along the banks, and the ever-possible explosion of a steam boiler. The *Far West* reached the post hospital at Fort Abraham Lincoln, just south of Bismarck, Dakota Territory, in a record fifty-four hours.

Henry Porter rejoined the "Expedition against hostile Sioux" in mid-July for the remainder of the summer-long campaign. Soon it became obvious that bullets were not the only agents of harm: many of the soldiers suffered from the natural consequences of campaigning and fighting in the West: infection, scurvy, rheumatism, diarrhea, and dysentery. Surgeons were not yet armed with an understanding of intestinal microbes or germs, and they could only try to mitigate the symptoms and discomfort.

As a civilian surgeon, Porter served the Army under a "contract." He performed his duties without the incentives of rank, promotion, and pension, and "bore the burden and heat of the day" like the regular soldiers under his care. He was guided by the surgeon's essential precepts – to stop the bleeding and ease the pain. The Army often rewarded contract surgeons with brief written commendations, but these rarely atoned for the frequent slights and humiliations and the sheer indifference these surgeons suffered as non-commissioned members. Twenty-two years after the Battle of the Little Big Horn, in 1898, Henry Porter was nominated for the Congressional Medal of Honor in recognition of his painstaking efforts to save the lives of over fifty soldiers wounded in one of this country's most searing and controversial battles. The proposal came to nothing.

The U.S. Army Veterinary Corps turns 97

Andy Watson, AMEDD Regimental Historian

Veterinarians officially and unofficially have been a part of the Army since its inception. Reliance on animals for transportation, nutrition, and commerce were essential to early army operations and logistics. While there were farriers and other "horse tenders" attached to the American Army from the time of the Revolutionary War, medical expertise and official recognition did not occur until much later.

Veterinary medicine, similar to other scientific disciplines in the United States slowly made gains during the 19th Century. A few civilian veterinarians were hired to support the Army during the War with Mexico (1846-1848). Later, the rank of veterinary sergeant existed briefly at the beginning of the Civil War in order to support some cavalry regiments, but the position was dropped in 1862. In 1863 each regiment of cavalry was authorized a regimental veterinary surgeon with the rank commensurate of a regimental sergeant major. Experience and field observation often overrode the lack of fixed standards in veterinary care; hence there were very few graduate veterinarians. To supplement the need for assistance civilian veterinarians were again hired, this time in greater numbers.

After the Civil War the smaller army still had mobility requirements and increased standards of its veterinary care. Existing cavalry regiments (6) were still authorized one veterinary surgeon and newly formed cavalry regiments (4) were authorized two veterinary surgeons, one of which would be designated the "Senior Veterinary Surgeon". Army General Orders of 1879, later included in Army Regulations of 1881 provided that all appointed veterinary surgeons "be graduates of established and reputable veterinary schools or colleges." Congressional legislation in 1899 improved the status of senior veterinarians in the cavalry regiments, when they were accorded rank between cadet and second lieutenant.

The turn of the 20th Century in "Progressive Era" America and a desire to improve quality of life led to new changes for the Army's veterinary service.

An investigation of “embalmed meats” at the close of the Spanish-American War (1898) mirrored the spirit of the time (The Jungle, foundation of the FDA) and established the use of Army veterinarians for food inspection.

From 1901 to 1906 a handful of veterinarians were detailed from the U.S. Department of Agriculture to the Subsistence Department of the Army for meat inspection. Later, post commanders were able to utilize veterinarians to inspect locally purchased beef.

Even before the build-up of the American Army for World War I, early planners saw the wisdom of increasing the size and permanency of the Army Veterinary Service. On 3 June 1916 the National Defense Act in Section 16, specified the appointment, duties, and implementation of veterinarians in the Army. This act also provided for an official Veterinary Corps with officer rank and a promotion structure.

Due to the reliance on animal transportation, many times over newer mechanical conveyances, the U.S. Army veterinarian gained status within the American Expeditionary Force. Similarly their efforts in “remounting” and treating horses and mules assisted the war effort in Europe, where animal stocks had been greatly depleted. The veterinarians would also begin a mission magnified in later years as they enhanced of camp conditions through better sanitation.

While World War I may have been the high-point for animal transportation care, World War II served as the standard for food inspection on a massive scale. Although animal care was provided for military working dogs, horses, and mules; food inspection served as 90% of veterinarian’s job during WWII. To supply the enormous Army, 142 billion pounds aggregate of meat and dairy products were inspected from 1940 through 1945. Complimenting this task were 11 labs in the United States and 23 units or labs overseas.

Within weeks of the invasion of South Korea by North Korea in June of 1950 Veterinary Service Units arrived to provide support. Their duties consisted largely of food inspection and also provided animal care for local livestock and military working dogs. In some cases the “fluid” battlefield found Army Veterinarians on the move and frequently in harm’s way.

In the 1950s the U.S. Department of Agriculture and Agricultural Research Service working with a U.S. Army medical unit with suitable x-ray equipment and Veterinary personnel, assisted in the trial irradiation and ultimately eradication of screw worms.* (*Cochliomyia hominivorax*) The fly larvae, once a scourge to livestock and some humans in the Americas, enters its host through open wounds and then consumes portions of the host’s flesh.

During the Vietnam War, U.S. Army veterinarians worked with the local populace to help curb a rabies epidemic within the country. Other challenges included not only food procurement, but also ice as well. Increasing numbers of military working dogs and mascots caused another shift in veterinary care as several small animal clinics and dispensary detachments were established for U.S. Forces in Vietnam.

More recently Army Veterinarians have been integral to military efforts in Afghanistan by maintaining animal health in an agrarian society. Similarly, the numbers of military working dogs in theater have increased as have certain threats such as rabies. Food safety also remains a constant task of importance. Continuous testing, service in the field, and research allow the Veterinary Corps to preserve public and animal health.

The Lens of History: Captain Frederick Reynolds' Photo Album

Lewis Barger, Historian, Office of Medical History

The Office of Medical History (OMH) maintains a research collection to support information requests from Headquarters, MEDCOM and the Office of The Surgeon General, and also supports requests from throughout the AMEDD, DoD, other Government agencies, representatives from the media, and the public. The largest portion of the OMH research collection is copied selections from the thousands of cubic feet of records in the National Archives pertaining to the history of the Army Medical Department. The next largest part is made up of collections of files that have been given to OMH for recording the history of the organization. Finally, we have a small collection of original items that have been donated to OMH by former members of the AMEDD or their relatives. One of these donations in our collection is the photo album of Captain Frederick Reynolds.

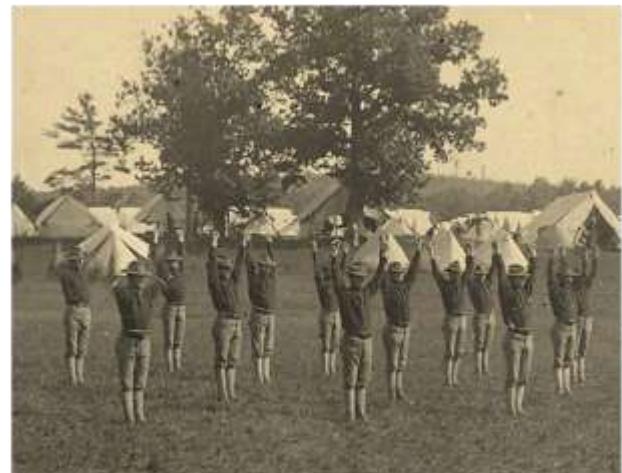
In the summer of 1903 Captain Reynolds, Assistant Surgeon, Medical Corps had been in the Army for eleven years. He had served tours in the United States in locations as far-ranging as Vancouver Barracks, Washington and Tampa, Florida, where he commanded a Division Hospital during the Spanish-American War. Following the war he had served in the Philippines during the insurrection, and then in 1901 had been assigned to command Hospital Corps Company of Instruction Number 1 at Washington Barracks, now Fort McNair. The Companies of Instruction existed to train enlisted soldiers to perform duties as members of the hospital corps, which included first aid, casualty transportation, care for the animals that moved ambulances and wagons, anatomy and physiology, pharmacy, cooking and the dietary considerations of the sick and wounded, clerical work, and nursing in addition to basic soldier skills. Non-commissioned officers received additional instruction in field sanitation, minor surgery, managing food service operations, and Army regulations. The company had three officers (a captain and two first lieutenants) and was authorized a cadre of 14 NCOs and 13 privates in addition. Between two and three hundred students might pass through the company in a year's time spending 4-6 months receiving training before being assigned to a permanent unit.



Captain Reynolds (Front Row, third from left) with 1st Lieutenant Frederick Dale and the NCO cadre.



Caring for mounts and draft animals.



Calisthenics demonstration.

During the summer the National Guard established camps to conduct extended collective training for their soldiers. Reynolds' company had previously been sent to encampments to demonstrate current medical support doctrine for National Guard soldiers, and in 1903 they were called upon to do so again. Captain Reynolds took with him the equipment to demonstrate a regimental hospital capable of holding 108 men, four wagons, an ambulance, and 63 of the 123 men assigned to the company at that time. They also brought 18 horses and mules to haul the wagons and ambulance, and five more horses for the officers, their orderly, and two of the NCOs.



Regimental Hospital tents set up as a demonstration unit.

At the end of the encampment the company packed up and embarked on a 195 mile return trip conducted in 9 stages. Along the way they served as a traveling recruiting ad for the Army Medical Department. Described in news articles as "Reynolds' Flying Column" because of their speedy marching, the company also spent rest days stopping in towns like Chambersburg, Pennsylvania, Hagerstown, Maryland, and Leesburg, Virginia. On the days they didn't march, they demonstrated their equipment and drills to the local populace and engaged in social events like baseball games. Musically inclined members of the company even provided music for a dance one night, playing instruments for the local town people. After their stop at Leesburg, when they again set up their Regimental Hospital for the benefit of Virginia guard units, the company headed back to Washington Barracks. In all they covered about 330 miles averaging nearly 20 miles each day they were on the road. And we have a record of their journey, thanks to Captain Reynolds, and to his descendants who donated his photo album.

Everyone else walked. In addition to his authorized supplies, Captain Frederick brought a camera and used it to record his company's deployment.

The company left Washington Barracks on the 1st of July arriving at Mount Gretna, Pennsylvania 134 miles and 8 days later. They spent 10 days with the 3rd Brigade of the Pennsylvania National Guard during which time they demonstrated the hospital and its equipment as well as some of the training given to hospital corpsmen, including calisthenics, field craft, litter drill, first aid, and the school of the soldier.

If you are interested in donating an item to the research collection, please contact Ms Mary Hope, senior archivist of the ACHH at

usarmy.jbsa.medcom.mbx.hq-medcom-office-of-medical-history@mail.mil

or 210-808-3296, DSN 471-3296.



Demonstrating Litter Drill.

A Civil War medic's knapsack

Chuck Franson, Registrar, AMEDD Museum

At the beginning of the Civil War, each regimental surgeon was outfitted with equipment and supplies for his regiment, including medicines, stores, instruments, and dressings, in quantities regulated by the Standard Supply Table for Field Service. In the field he was accompanied by a hospital orderly, who carried a knapsack containing a limited supply of anesthetics, styptics, stimulants, anodynes, and material for primary dressings.

An army board had recommended this hospital knapsack for adoption in 1859. It was made of light wood or wicker, and was covered with canvas or enameled cloth; it weighed about 18 pounds when full. This knapsack was in general use in the first year of the war, but it was difficult to keep items in order. In 1862 it was replaced with the "Regulation Hospital Knapsack of 1862", which featured a better arrangement of supplies and medications. The new pattern was 16 inches high, 12½ inches wide, and 6 inches deep; the contents were packed in 3 drawers, which were more accessible than in the old style and less liable to become disarranged or broken.

The contents of the knapsack were:

One piece of white wax, 8 oz. simple cerate, 12 oz. chloroform, 5 yds. adhesive plaster, 2 yds. isinglass plaster, 1 oz. persulphate of iron, 100 compound cathartic pills, 150 blue mass pills, 150 opium pills, 100 opium and camphor pills, 150 quinine pills, 8 oz. aromatic spirit of ammonia, 16 oz. brandy, 4 oz. laudanum, 10 bandages, 10 binder's boards, 4 oz. charpie, 2 medicine glasses, 1 (spirit) lamp, 12 oz. lint, 1 box matches, 1 paper of pins, 1 spool of surgeons' silk, 4 pieces of sponge, 4 (Dunton's) field tourniquets, 2 spiral tourniquets, 1 piece of tape, 1 spool of lead wire, 1 spool of silver wire, and 1 spatula.

Weight when packed was nearly 20 pounds. Despite its convenience and general adaptability it was too unwieldy to be carried by the surgeon himself, and was liable to be lost in action when left to anyone else.

It was replaced in early 1863 by a field case or "Surgeon's Companion" designed by Medical Inspector R. H. Coolidge, similar to a British model, to be carried by the surgeon himself if necessary.

This one contains:

Top Drawer
1 Scarificator
2 Tourniquets
2 rolls of cotton tape ½" wide
8 Wooden slates (splints)
1 Container Plaster
1 Roll of Adhesive Plaster w/o container
1 Bloodletting knife

Middle Drawer
33 Rolls Bandages
1 Pewter container Pilcathart Co.
1 Pewter container Pil Opit et camph
1 Pewter Container Chloroformum
1 Scarifacator in box

Bottom Drawer
3 Dunton's Tourniquets
Pewter Containers: 2 Pil Hydrarg; Pil Quinia Sulph; Pil Opit; Sp Ammon Ar: Chloroformum; 2 Ceratum Simp; Opit; Pil Opit et Camph; Sp Vini Gale



The Formation of the Army Medical Department Regiment

Robert L. Ampula, Administrative Officer, US Army Medical Department Regiment

The United States Army traces its history back to the Continental Army which was established on June 14, 1775 prior to the formation of the United States. A little more than a month later, the Continental Congress created the Army Medical Department for that Army on 27 July 1775. Although it was not called the Army Medical Department (AMEDD) at that time, it was undoubtedly the birth of Army Medicine. From that day in July of 1775, the Army Medical Department has embarked upon a proud journey through American history. It wasn't until 1986, however, that all of the heritage, history and traditions of the Army Medical Department were encapsulated under one organization and united under one flag. That year saw the activation of the Army Medical Department Regiment. As the Army Medical Department approaches its 238th birthday, it seems an appropriate time to look back on the origin of the AMEDD Regiment 27 years ago.

The formation of the Regiment actually began 5 years earlier in 1981 when the United States Army Regimental System (USARS) was created by direction of the Chief of Staff of the Army, General Edward C. Meyer. He would subsequently leave the Army before full implementation was achieved but General John A. Wickham Jr. would continue to champion the endeavor. The original concept was created to provide each Soldier with continuous identification to a single Regiment and to support that concept with a personnel system that would increase a Soldier's probability of serving recurring assignments with his or her Regiment⁽¹⁾. The concept encompassed the active Army, the National Guard and the Army Reserve.

The mission of the USARS was defined in 1986 as follows: The mission is to enhance combat effectiveness through a framework that provides the opportunity for affiliation, develops loyalty and commitment, fosters an extended sense of belonging, improves unit esprit, and institutionalizes the war fighting ethos. The concept offers the opportunity for long-term identification with a regiment or corps and provides the potential for recurring assignments within a regiment or corps and also provides the opportunity to further emphasize the history, customs, and traditions of the regiment or corps. That mission remains unchanged today.

Unlike the plans for the Combat Arms which have multiple Regiments and Corps, the plan for Combat Support (CS), Combat Service Support (CSS), and Special Branches was to fully integrate them into the USARS under the "whole branch" concept. This concept was not universally embraced by leaders of these organizations. It was argued by some that the Regimental System could not be effectively integrated into CS, CSS and Special Branches. They voiced their concerns to the Chief of Staff by pointing out that Combat Arms organizations could move together whereas the whole branch concept precluded this option. The Chief of Staff acknowledged their concerns but directed the CS, CSS and Special Branches to continue plans to become part of the Regimental System.

On 5 September 1985, the U.S. Army Medical Department submitted their plan to Headquarters, Department of the Army. The plan identified the Surgeon General as the Commander of the Regiment and his staff filling the positions of the Regimental Staff. The activation date was suggested for 27 July 1986 to coincide with the founding of the Army Medical Department. On 17 January 1986 the plan was approved by the Chief of Staff. HQDA issued General Order number 24 dated 30 May 1986 establishing the Army Medical Department as the Army Medical Department CORPS effective 27 July 1986. It was quickly noted that the Army Medical Department was already made up of six Corps⁽²⁾ and to name the Army Medical Department a Corps would add confusion to this new entity. HQDA rectified the situation by issuing General Order 27 on 30 June 1986 which rescinded the establishment of the Army Medical Department Corps and established the Army Medical Department Regiment effective 27 July 1986 and established the home of the Army Medical Department Regiment at Fort Sam Houston, Texas.

Much thought and planning went into the events surrounding the activation of the Army Medical Department Regiment. There was much excitement and enthusiasm as the activation neared. The first official event marking this historic occasion was an NCO dining-in ceremony attended by approximately 500 noncommissioned officers. On behalf of the non-commissioned officers of the Army Medical Department, CSM Howard R. Harrell, the president of the dining in and Command Sergeant Major of Health Services Command (HSC), presented a saber inscribed with the words "AMEDD Regimental Saber" to LTG Quinn H. Becker, the first commander of the AMEDD Regiment. LTG Becker, in turn, passed the saber to Sergeant Major Daniel J. Bullis, the first Sergeant Major of the Regiment. The saber then became part of the Regimental memorabilia.

The next day a solemn and inspiring event transpired when newly constructed enlisted barracks were memorialized for PFC Richard G. Wilson. PFC Wilson was awarded the Medal of Honor for his heroic actions, at the cost of his life, during the Korean War. LTG Becker hosted the event which was attended by PFC Wilson's mother, Alice Wilson, her granddaughter Connie Wilson and Richard Wilson's brother, Ronald Wilson. LTG Becker unveiled the plaque for PFC Wilson that would be displayed at the barracks. LTG Becker then read PFC Wilson's moving Medal of Honor citation which illustrated his extraordinary bravery and devotion to his fellow Soldier (3). Afterward, LTG Becker and Mrs Wilson cut the ribbon dedicating Wilson Hall.

Later, there was an event at the Combat Medic Memorial located at the future site of the Army Medical Department Museum. The Combat Medic Memorial depicts a medic rendering aid to a fallen comrade. LTG Becker and an enlisted Soldier placed a wreath to recognize and pay homage to all the medical personnel throughout our long and proud history who have given their lives so that others may live. A lone bugler played taps at the closing of the ceremony.

That evening, events shifted to the officer's club, which was selected as the site of the first Regimental Commander's reception. During this historic event, LTG Becker and MG retired Spurgeon H. Neel, the first commander of HSC, unveiled a plaque dedicating the Sam Houston room as the Army Medical Department Regimental Mess. A small number of the new Regimental Distinctive Insignias (RDI) had been procured by the newly formed Regiment and LTG Becker took this opportunity to present the first of them to MG Tracey E. Strevey Jr., the commander of HSC, MG William P. Winkler Jr., the commander of the Academy of Health Sciences (AHS), CSM Kramer D. Regan, AHS, and CSM Howard R. Harrell, HSC. Among the additional recipients were the Corps Chiefs and the Honorary Colonel of the Regiment, MG retired Spurgeon Neel and the Honorary Sergeant Major of the Regiment, CSM retired George A. Pierce. A cake cutting ensued and following tradition, the senior and junior officer present cut the cake. LTG Becker and LT Lindsey Brim used the new Regimental Saber to cut the Regimental cake at this festive occasion.

The morning of the activation was clear and very warm, normal for San Antonio in July. A crowd started gathering early for the historic event. More than 4000 active duty Soldiers, retirees and civilians were in the stands and adjacent viewing areas to see the unfurling of the Regimental colors for the first time. The event truly captured the spirit of the Regiment as the reviewing officer, LTG Quinn H. Becker, was joined on the reviewing stand by MG Julius J. Chosy, Deputy Surgeon General for Mobilization and National Guard Affairs and BG Robert L. Wick Jr., Deputy Surgeon General for Mobilization and Reserve Affairs. After the colors were unfurled, LTG Becker presented MG Neel and CSM Pierce certificates appointing them as the first Honorary Colonel of the Regiment and Honorary Sergeant Major of the Regiment. The ceremony ended with the 1st Cavalry Division Horse Platoon displaying their precision horsemanship. The platoon depicted the mounted cavalry in the years following the Civil War. The demonstration concluded with a cavalry charge to the delight of the spectators.

The festivities concluded at Salado Park with one of the largest picnics ever held on Fort Sam Houston. A combined organization day of over 5000 faculty and students of the Academy of Health Sciences as well as Soldiers and civilians of the Army Health Services Command were in attendance. There were sporting events, musical performers and of course food and merriment.

Today, as it was on that day in 1986, the Regiment stands as the one binding element that unites all members of Army Medicine under one flag. The Regiment includes all AMEDD personnel, whether active duty, Army Reserve, National Guard, or AMEDD civilian employees who elect to affiliate with the Regiment. It includes TOE, and TDA personnel in the continental United States as well as those serving overseas, all sharing the same traditions and history. A history that starts during the War for Independence through the dark days of the Civil War; from the Meuse-Argonne offensive in the Great War to the beaches of Normandy and the Philippine Islands during WW II; enduring the bitter cold of Korea and the sweltering heat of Vietnam; from Grenada and Panama, and the liberation of Kuwait, to the continuing conflict in Afghanistan, members of the Army Medical Department have always persevered in their mission to care for the sick and wounded in order to conserve the fighting strength.

(1) Army Regulation 600-82, The U.S. Army Regimental System 1 May 1986.

(2) Medical Corps, Nurse Corps, Dental Corps, Veterinary Corps, Medical Service Corps, Medical Specialists Corps. The Enlisted Corps and Civilian Corps are not officially recognized as separate corps by The Institute of Heraldry.

(3) The entire citation can be viewed on the Regiment web site

<http://ameddregiment.amedd.army.mil/moh/bios/wilsonr.html>

A surgeon's sword

Chuck Franson, Registrar, AMEDD Museum

Beginning in 1840 and continuing for 62 years, U.S. Army Medical Officers were required to purchase a dress sword. This sword was completely ceremonial in purpose and was not considered an implement of war, unlike cavalry sabers or foot officer's swords. The regulations called for a "small sword and scabbard, according to pattern in the Surgeon-General's office." Even though the published details are vague, the M1840 sword is easily recognized.



The 1840 medical sword in the collection of the AMEDD Museum has a blade marked "Solingen" indicating that it was manufactured in Solingen, Germany, a city with a long history of cutlery manufacturing. The imported blade was transformed into a sword by the G. W. Simons & Brother Company of Philadelphia Pennsylvania. This company began in 1839 and by 1860 was manufacturing a diverse array of gold and silver items including gold and silver thimbles, pencil cases, tooth and ear picks, cane heads, bracelets, studs, seals and badges. With the expansion of the Army due to the outbreak of the American Civil War in April 1861, Simons added officer's swords to their product line.



The sword has a double-edged straight blade, etched "United States Medical Staff" on the obverse, and on the reverse an eagle and a banner with "E Pluribus Unum." The hilt has an English style "M S" (for Medical Service) in silver on a shield-shaped langet, sitting above 13 stars enclosed by a wreath. The hilt has an acorn-shaped pommel, with scroll-shaped double quillon. The hilt and scabbard are decorated with acanthus leaves, a very popular decorative motif of the period. The hilt, scabbard and fittings are made of gilt over brass, with the blade being of steel. The reverse langet was frequently engraved with the name of the officer purchasing the sword. The langet on this sword is unfortunately blank. The Medical Officer's sword was discontinued in 1902, when regulations prescribed the M1902 sword for all officers except chaplains.



Preserve Now Or Lose Your Past

Carlos Alvarado, Archivist, AMEDD Center of History and Heritage

When military historian Bell I. Wiley addressed a Society of American Archivists meeting in 1959, he recognized that the Civil War Centennial was the perfect opportunity to supplement the archival collections of the war. The occasion would renew the curiosity of the causal citizen and allow archivists “to gather in from attics, basements, and other secluded places a great harvest of letters, diaries, reports, newspapers, photographs, and other source materials bearing on the conflict.” Several years later, James I. Robertson, Executive Director of the U.S. Civil War Centennial Commission, confirmed that sentiment noting that “thousands of people are beginning to ransack grandpa’s trunk or to search through the attic of the old home place.” Both men argued that the archivist and the public at large had a responsibility during this time to collect and preserve war-related materials and that although the events of the centennial—the pageantries and battlefield reenactments—were necessary, more work could be done to document the history.

Just over 50 years later, as we commemorate the sesquicentennial of the U.S. Civil War, Wiley and Robertson’s observations about the importance of archival materials are no less relevant. However, the need for additional primary sources does not apply only to the study of the Civil War. Archivists, librarians, and museum curators are presently asking important questions about how best to collect and safeguard the experiences of individuals during modern conflicts: What resources are available to meet the specific preservation needs of past and present service members? How do we meet the challenges and opportunities digital and social media present in terms of collection, privacy, and access? While these questions only begin to reveal the difficult tasks facing information specialists, the consequence of not asking them at all or of inaction is a silencing of history. It is true that we will never collect every single document, photograph, and digital file, but it is important to try and save those that do have meaning for us sooner rather than later. It will be incumbent upon the custodians of archival collections and individuals touched by conflict to look with an eye to posterity and assume the responsibility assigned by Wiley and Robertson all those years ago.

Bell I. Wiley, “The Role of the Archivist in the Civil War Centennial,” *American Archivist* 23, no. 2 (April, 1960): 132. <http://hdl.handle.net/2027/mdp.39015072452769?urlappend=%3Bseq=147> (accessed June 19, 2013).

James I. Robertson, “The Civil War Centennial—Archival Aspects,” *American Archivist* 26, no. 1 (January, 1963): 15. <http://archivists.metapress.com/content/Q41425587VT69224> (accessed June 19, 2013).

Guy R. Hasegawa. Mending Broken Soldiers: The Union and Confederate Programs to Supply Artificial Limbs. Carbondale, IL: Southern Illinois University Press, 2012. Photographs, appendices, 126 pages. \$24.95.

This very short book (only 80 pages of main text) describes both the US and Confederate artificial limb programs, while drawing few conclusions. On 16 July 1862 the US Congress appropriated \$15,000 for prosthetic limbs. Veterans of previous wars could apply, the limbs could be combat or non-combat losses, and officers were excluded. (One argument for the bill was that it would reduce claims for disability pensions since men could work for themselves.) This was a step into the unknown for the government; previously there had been no systematic provision of prostheses.

The US had a small but growing prosthetics industry; there had been an increase in designs in the 1850s, which would continue in the 1860s. There was much bickering among inventors, some of whom were physicians although the medical degree of the period did not necessarily mean a better understanding of anatomy and physiology. Designers used the full gamut of materials that promised utility: various woods, metals, fabrics, leather, and rubber. Replacement arms and hands were more cosmetic than legs, although some amputees could manage to write and perform other daily tasks.

In the summer of 1862 Army Surgeon General William Hammond assembled a board of doctors, both civilian and military, to advise about effective prosthetic limbs. They did not recommend the cheapest model, and proposed an allowance toward the cost but allowing the patient to choose their limb. That turned instead into government contracts (which actually reduced costs), with all the suppliers using their war work in advertising campaigns. At times, manufacturers could not charge patients more than the government allowance, even if the individual wanted to buy a more elaborate model, e.g. with a laterally-articulated ankle. Through the war, prosthetics research and development continued, and medical boards repeatedly examined new models, approving some and disapproving others.

Soldiers would be shown the range of government-approved limbs and would select one; the government would then send the patient to the company's offices for fitting. In late 1864 patients were ordered to test their prosthesis for 3 days to make sure it was comfortable. Through May 1866 the US program provided 3,800 legs and 2,200 arms and cost approximately \$300,000.

The Confederacy had private relief instead of a government program; in January 1864 a Confederacy-wide Association for the Relief of Maimed Soldiers formed. However, government officials and military doctors were directors of ARMS, so it was a public-private hybrid. The CSA had trouble establishing a prosthetics industry from no pre-war base; material and labor were in short supply. Even getting samples to copy was difficult. Only a few hundred legs were produced (they never got to arms) and after the war the various ex-Confederate states ran their own programs for their veterans. Hasegawa does not explore any other Confederate programs; presumably some local programs existed to at least provide peglegs.

This book covers its narrow topic thoroughly, but will interest only a specialist audience. The author makes few efforts to connect to publications about disability and veterans (since few amputees returned to duty), mainly focusing on the prosthesis industry, and also does not describe any individual cases.

Writing for The AMEDD Historian



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We are seeking contributions! We believe variety is the way to attract a variety of audiences, so we can use:

Photos of historical interest, with an explanatory caption

Photos of artifacts, with an explanation

Documents (either scanned or transcribed), with an explanation to provide context

Articles of varying length (initially we will try a 500 word minimum), which must have sources listed if not footnotes/endnotes

Book reviews and news of books about AMEDD history

Technical requirements:

Photos will need to be at least 96dpi; contact us about file format.

Text should be in Microsoft Word (.doc or .docx) format. Please do NOT send text with footnotes/endnotes in .pdf format.

Scans should be in Adobe Acrobat (.pdf) format.

Material can be submitted to usarmy.jbsa.medcom.mbx.hq-medcom-office-of-medical-history@mail.mil